- 6. (Amended) The method of claim 5, wherein said determining step includes: matching cells in the grid levels of the reference image with cells in the grid levels of the target image.
- 7. (Amended) The method of claim 5, wherein said determining step includes:

  matching the grid levels of the reference image with respective ones of the grid
  levels of the target image, and cross-matching grid levels of the reference image with grid levels
  of the target image.
- 8. (Amended) The method of claim 5, wherein said determining step includes:

  matching region representative color values between the grids levels of the reference and target images.
- 9. (Amended) The method of claim 5, further comprising:

  determining a similarity between cells in the hierarchical grid levels of the reference and target images in accordance with steps that include:

multiplying color similarity (Color\_Sim) corresponding to a similarity of region representative colors between cells in the grid levels of the reference and target images and a first weight,

adding a value obtained by multiplying similarity (I) representing a similarity of a reliability between tells in the grid levels of the reference and target images and a second weight to the color similarity (Color\_Sim), and

normalizing the cell similarity.

10. (Amended) The method of claim 5, further comprising:

determining a similarity between same grid levels in the reference and target images based on a total value summed by shifting in a horizontal and vertical direction based on a shifting amount by a difference of widths and heights between grid levels when two grid levels are compared and the similarity is calculated.

11. (Amended) The method of claim 5, further comprising:

determining a color similarity between the grids of the reference and target images based on a value summed shifting in a horizontal direction and a vertical direction by a difference in width and heights between the grid levels.

12. (Amended) The method of claim 5, wherein a cell similarity between grid levels of the reference and target images is used for searching a same position and different position between same levels in the case that the search is performed by matching a color region.

## Serial No. 09/494,761

13. (Amended) The method of claim 5, wherein a color region matching operation between the grid levels of the reference and target images is directed to searching at a same position of different levels and at a different position when searching the color similarity between different levels.

Please add new claims 14 - 26 as follows:

50

14. An image data structure, comprising:

a first grid; and

a second grid,

wherein the first grid and the second grid express a feature of an image at different resolutions.

D

- 15. The image data structure of claim 14, wherein the first grid includes a first number of cells and the second grid has a second number of cells different from said first number of cells.
- 16. The image data structure of claim 15, wherein said second number of cells is greater than said first number of cells.

## Serial No. 09/494,761

- 17. The image data structure of claim 14, wherein the first grid and the second grid are hierarchically related.
- 18. The image data structure of claim 17, wherein the second grid includes a plurality of groups of cells, each group representing the feature of said image at different areas within a respective one of the cells in the first grid.
- 19. The image data structure of claim 15, wherein the feature is a spatial color feature.
- 20. The image data structure of claim 19, wherein each of the cells in the first grid is assigned a first value and a second value for representing the spatial color feature of said image.
- 21. The image data structure of claim 20, wherein the first value is a regional representative color and the second value is a reliability score indicative of an accuracy of the regional representative color.
- 22. The image data structure of claim 20, wherein each of the cells in the second grid is assigned multiple values for representing the spatial color feature of said image.

## Serial No. 09/494,761

- 23. The image data structure of claim 15, wherein the number of cells in the first grid and the number of cells in the second grid are proportional to a size of the image.
- 24. The image data structure of claim 23, wherein the image has a square shape and is uniformly divided into the cells of the first grid.
- 25. The image data structure of claim 23, wherein the image has a non-square shape, and wherein a first side of the image is divided uniformly and a second side of the image is divided based on a dividing unit of the first side, said divisions forming the cells in the first grid.
  - 26. The image data structure of claim 15, wherein each of the cells in the first grid have a first size and each of the cells in the second grid have a second size different from said first size.

## IN THE DRAWINGS

A Proposed Amendment to the Drawings is submitted with this paper.